

Mr. Vaverchak
One Ashburton Place,
Boston, MA, 02108

Re: Response to ODF PLUG-IN RFI (RFI 06-1)

Dear Mr. Vaverchak,

Tonic Systems, Inc (<http://tonicsystems.com>) is a California corporation that specializes in products and tools that facilitate creating, updating and converting PowerPoint documents. Tonic Systems is a supporter of the ODF specification and a member of the ODF technical committee. As we are in the business of making MS PowerPoint documents more accessible, already converting them to PDF, SVG, SWF and a range of raster image formats, it is naturally a business goal to also support converting these documents to and from the ODF drawing documents.

Before answering each question specifically, I would like to address some general issues. First and foremost the OpenDocument Format specification is incomplete. There are a number of areas that are either underspecified or inconsistently specified. This is particularly true of the drawing part of the specification, which would be heavily utilized by presentations. We have raised a number of these issues with the ODF technical committee and are hoping to get them resolved as quickly as possible. Unfortunately it is sometimes difficult to get the attention of committee members and progress has been slow.

Through the media, we have been lead to believe that the Massachusetts ITD will receive a response from the OpenDocument Foundation claiming they have “completed testing on an ODF Plug-in for all versions of MS Office”. Given the ODF specification is incomplete, we would caution that this is unlikely. Perhaps more accurately, is that the OpenDocument Foundation has a plug-in for OpenOffice formats. While the OpenOffice and OpenDocument formats are related, they are not the same. ODF, as you may well be aware, is the result of standardizing the OpenOffice formats. Along the way there have been changes so that OpenOffice, as it stands today, is not actually conformant with ODF. In addition, OpenOffice has implemented the underspecified parts of the specification in their own unique fashion. Therefore, in a certain sense, the OpenOffice format has some “proprietary” elements.

I bring the above to your attention not to diminish the work of the OpenDocument Foundation, but to set the picture as to why, as you will read below, there is work to be done to truly get ODF plug-ins or converters.

As a final point, please note that our responses below only pertain to the task of converting **PowerPoint** Office Documents into their corresponding OpenDocument Format, and vice versa.

Existence of Parties, Projects, and Status

A. What is the present state of efforts to create ODF plug-ins or converters for Microsoft Office, whether undertaken by respondent or others through projects with which the respondent is familiar?

Tonic Systems has a shipping converter product (TonicPoint Transformer) that converts PowerPoint documents to a range of other formats, specifically images (PNG, BMP and JPG), PDF, SVG and SWF. We are currently looking to add ODF as an output format. The largest hurdle to this goal is having a complete ODF specification.

In a subsequent release, we plan to add reading a range of presentation formats, including ODF. At this point the Transformer would be able to convert PPT to ODF and vice versa.

B. Whether an open source project, an independent developer, a vendor, or a group of vendors is currently developing, planning to develop, or interested in developing an ODF plug-in or converter for Microsoft Office 2000, Office 2003, and the upcoming Microsoft Office 2007, capable of reading and saving ODF documents. Please provide the identity of such open source project, independent developer, vendor or vendors, their address, names of principals, and a description of their experience in projects of similar technical difficulty.

As stated above, Tonic Systems (a vendor) is currently planning to develop an ODF converter for MS Office 2000 and Office 2003 capable of reading and saving ODF documents.

I may be contacted as a principal of Tonic Systems at:

Anthony Glenning
Tonic Systems, Inc
1559B Sloat Blvd, #130
San Francisco, CA 94132

Tonic Systems has extensive experience with the PowerPoint binary format. We currently have shipping products that read and write to that format. And we currently have a converter that converts PowerPoint into other formats, just not yet ODF.

C. Who owns the intellectual property associated with current and planned efforts to build an ODF plug-in or converter?

Tonic Systems, Inc.

Mode of Operation; Ease, Transparency, Economy of Use

D. Whether such a plug-in would be capable of exchanging textual (Word), spreadsheet (Excel) and presentation (PowerPoint) documents, whether in legacy or XML formats, to and from ODF, and rendering such documents using Microsoft Office.

Our goal is to develop a presentation converter (not a plug-in) that is capable of converting legacy and XML formats both to and from ODF.

E. Whether this exchange can be performed directly through the “File Open,” “File New,” and “File Save/Save As” menu options in Microsoft Office or their Microsoft Office 2007 equivalents, or whether a different translation mechanism would be required (please describe).

This exchange is to be performed as a standalone operation, outside of the Microsoft Office products. The converter would run as a separate java-based utility either on a server for conversions *en masse* or on the desktop for conversions on a case-by-case basis.

F. Whether the plug-in can allow Microsoft Office to save to ODF as the default format.

No, since it is not a plug-in.

G. What limitations, either in terms of fidelity of exchange, type of document, or user operation, should be anticipated for such a plug-in or converter?

We expect the only limitations in fidelity would be those imposed by the formats themselves. For example, if a PowerPoint document has a radial gradient fill, and ODF does not contain a mechanism to describe that (as is currently the case), then that aspect of the presentation could not be converted.

H. Against what ODF conformance standards would such a plug-in or converter be assessed?

We anticipate the converter to be assessed against the next versions of the ODF specification. We do not believe the current ODF standards are sufficient to have truly meaningful notion of conformance. Specifically there could be a number of incompatible, yet conformant implementations of the current specification.

I. What level of visual fidelity, onscreen and in print between Microsoft binary or XML formatted documents and ODF documents could be achieved?

Visual fidelity is largely independent of the format of the document. It is dependent on the tool used to view the document. To the extent that both the ODF and Microsoft formats contain comparable feature sets (refer to question G.), the display of documents can be extremely close. Note that we expect there to always be some latitude in implementing the rendering engines, therefore there is the possibility that some renderers will implement different algorithms than others, with potentially a significant effect on appearance. For example, the choice of word wrapping algorithms is one area that can affect the appearance. So a document converted to ODF and opened in StarOffice may have different text wrapping than the same document opened in another ODF viewer, and either one of which may be a closer or further match than the original document in PowerPoint. If you like, a Microsoft Office document is both the format used to describe the document and the interpretation of the format (word wrapping, shading algorithms, fall-back font selection, etc.) used to render the document.

J. How difficult would it be to install and use an ODF plug-in or converter?

Desktop installation of the converter would follow established software installation processes. The user could download a Windows distribution, double-click on it to install and end up with a desktop shortcut and a menu item (if desired) with which to run the converter.

K. What training would be needed, if any, to correctly use the plug-in or converter?

Fairly minimal training would be needed. To use the desktop converter, you would launch the program, say by double-clicking the icon, open the file in the current format (either through a menu option or drag-and-drop), and then select “File -> Save As...” to save it in the alternate format.

L. The contemplated mechanics of how such a plug-in or converter would be installed and would operate in practice. Diagrams and or screen mockups would be helpful in clearly describing the proposed solution.

Refer to K.

M. What are the anticipated end-purchaser acquisition and maintenance costs for such a plug-in or converter?

The desktop version is targeted to cost between \$29.95 and \$49.95, with suitable volume discounts. The server product will cost \$2,995.00, for a perpetual unlimited user license. Maintenance (support and upgrades) will cost around 15% of the license fee per year.

Timeframes, Level of Effort, Resources, Technical Details, Risk

N. In what timeframes would such a plug-in or converter be completed, available for testing, and available for deployment? Please describe availability in terms of the following matrix, and please describe anticipated functional levels clearly:

The times below are assuming a completed ODF specification by 12/31/2006. This is the gating factor with respect to the dates given below.

	Developer Code Complete	Available for Customer Testing (Beta)	Certified as compliant with ODF Standard	Available for Customer Use
Functional Level (Convert PPT to ODF) (Release 1.0)	2/15/2007	3/15/2007	3/31/2007	3/31/2007
Functional Level (Convert ODF to PPT) Release 1.1	6/30/2007	7/30/2007	8/15/2007	9/1/2007

O. How many as-yet unspent person months on the part of respondent, or others through projects with which the respondent is familiar, would be involved in an effort to achieve the objectives outlined above?

Release 1.0: Three person-months

Release 1.1: Six person-months

P. What external (sponsor, investor, customer) resources that are not currently available or committed to the respondent would be necessary to achieve the functional release timeframes described above?

An influential advocate to get the ODF specifications completed.

Q. Describe the language in which such a plug-in or component would be written, and any tools that would be required to develop it, or extend its functionality.

The converter would be written in java using standard java development tools.

R. How much and what kind of cooperation from Microsoft would be required of a team creating an ODF translator plug-in that was very well integrated with Microsoft New, Open, Save, and Save As functions?

None required for the converter.

S. What kind of technical information would the respondent require from Microsoft in order to successfully develop an ODF translator plug-in that was very well integrated with Microsoft New, Open, Save, Save As functions?

None required for the converter.

T. What level of effort and costs are estimated to support the plug-in on a going forward basis to maintain compatibility with the latest format versions over time?

We would expect to have one FTE allocated to this task. The end-user cost would be purely the maintenance fee describe in M (15% per year).

U. What are the business, financial and technical risks associated with such a project?

The largest business risk is whether there will be sufficient adoption of the OpenDocument format, that there is sufficient interest by the public in converting to and from it. Clearly Microsoft is releasing its own XML-based format to compete with OpenDocument. Although proprietary, Microsoft's format will be complete and will have an extremely large installed user base. We believe there is great willingness by the public to move to open standards (as evidenced by the current Massachusetts ITD interest), but if the OpenDocument standards are incomplete and lead to a fragmented set of non-interoperable tools, then they will quickly fall from public favor.

The largest technical risk is whether the OpenDocument format is and remains expressive enough to represent Microsoft Office documents now, and into the future. Because Microsoft is the incumbent player, Microsoft sets the de facto list of features that need to be represented by the OpenDocument formats. To stay current, OpenDocument formats will need constant technical innovation.

V. Compare the level of effort for creating an ODF-translator that will work with (1) Office 2000, (2) Office 2003 and (3) Office 2007 (based on currently available information).

The level of effort for creating an ODF-translator that will work with the Microsoft Office binary formats (for 2000, 2003, and 2007) is roughly the same. The level of effort for translating Office 2007's XML format is at least twice that of the binary format.

General

W. Please provide any other information you believe to be important and germane to the purposes of this Request for Information.

Here are links to some of issues we have raised regarding the incomplete OpenDocument specification:

<http://www.oasis-open.org/archives/opendocument-users/200601/msg00003.html>
<http://www.oasis-open.org/archives/opendocument-users/200601/msg00007.html>
<http://www.oasis-open.org/archives/opendocument-users/200601/msg00008.html>
<http://www.oasis-open.org/archives/opendocument-users/200601/msg00009.html>
<http://www.oasis-open.org/archives/opendocument-users/200601/msg00010.html>
<http://www.oasis-open.org/archives/opendocument-users/200601/msg00013.html>
<http://www.oasis-open.org/archives/opendocument-users/200601/msg00014.html>
<http://www.oasis-open.org/archives/opendocument-users/200601/msg00015.html>
<http://www.oasis-open.org/archives/opendocument-users/200601/msg00016.html>

To conclude, we would be pleased to discuss any areas of our response with you. We also believe you could do a great service to the ODF specification by highlighting the areas that need attention and hopefully gain some traction on resolving the outstanding issues within the community.

Yours sincerely,

Anthony Glenning

CEO

Tonic Systems, Inc